All Agency Project Request

2009 - 2011 Biennium

Agency	Institution	Building No.	Building Name
University of Wisconsin	Madison	285-0A-0055	CHAMBERLIN HALL, THOMAS C

Project No. 11D2P **Project Title** Chamberlin Hall Laser Lab Rmdl

Project Intent

This project provides pre-design and design services to construct selective mechanical and electrical upgrades in laboratories 5323 and 5335 to correct and stabilize temperature and humidity levels required to accommodate laser experiments.

Project Description

Project work will be staged, completing the necessary upgrades in laboratory 5323 (757 SF) first and then beginning project work in the southern third of laboratory 5335 (570 SF). After laboratory 5323 work is complete, equipment from laboratory 5335 will be moved into laboratory 5323 to allow the second stage of project work to be completed.

Laboratories 5323 and 5335: Project work includes demolition of the supply ductwork and the VAV system; installation of two (2) new >3,000 CFM fan coil unit with cooling and heating coils (one for each laboratory); and installation of a new chiller (including an automated or manual filter on the chilled water supply) to serve both spaces. The new fan coil units will be installed in the chase adjacent to the laboratories or in the mechanical room one floor above. Air will be conditioned through the new fan coil unit and distributed through a new ducted VAV system to perforated diffusers and re-circulated back to the fan coil unit. The return air and exhaust air systems will be modified and balanced, and the mechanical controls and the electrical system will be upgraded as needed to support the laser experiments. Exterior grade perimeter weather stripping will be installed around both laboratory perimeters and sweeps will be installed on all doors in laboratory 5323 and the southern third of laboratory 5335. Perimeter walls will be caulked and sealed at both the ceiling and floor junctions.

Laboratory 5335: Project work includes demolition of the north wall movable partition and associated door assembly in the southern third of the space and constructing a new insulated permanent partition wall with a vapor barrier.

Project Justification

Although this portion of Chamberlin Hall was renovated in the previous remodeling project (99J3M), the temperature and humidity fluctuations in these laboratories are too significant to accommodate laser experiments. Moisture within the air can dramatically affect the precision required for laser technology. Federal funding (used for the experiments to be conducted in these labs) requires precise controls of the laboratory environment. The Principal Investigator and staff require increased control of temperature and humidity levels to avoid compromising the experimental data collection and analysis. The new mechanical system will only allow temperature fluctuations of half a degree Fahrenheit and humidity level deviations by five percent.

A/E Consultant Requirements

☑ A/E Selection Required?

Consultants should have specific expertise and experience in the design and coordination of mechanical and electrical systems in laboratory environments as part of a design team. Work includes site surveys, acquiring field data, and verifying as-built conditions to assure accurate development of design and bidding documents, and production of necessary design and bidding documents. Consultants should indicate specific projects from past experience (including size, cost, and completion date) in their letter of interest and when known, include proposed consulting partners and specialty consultants.

The consultant will verify project scope and budget estimates, and recommend modifications as required to complete the specified project intent. The consultant will prepare a pre-design document to establish an appropriate project scope, budget, and schedule prior to the university

Commissioning

☑ Level 1

☐ Level 2

seeking authority to construct from the Board of Regents and State Building Commission.

Project Budget		
Construction Cost:		$339,000
Haz Mats:		$0
Construction Total:		$339,000
Contingency:	8%	$27,100
A/E Design Fees:	8%	$27,100
DFD Mgmt Fees:	4%	$14,600
Equipment/Other:		$4,200
		$412,000

Funding Source	Total
GFSB - []	$0
PRSB - []	$0
Agency/Institution Cash []	$0
Gifts	$412,000
Grants	$0
Building Trust Funds [BTF]	$0
Other Funding Source	$0
	$412,000

Project Schedule

SBC Approval:	12/2011
A/E Selection:	06/2011
Bid Opening:	03/2012
Construction Start:	05/2012
Substantial Completion:	08/2012
Project Close Out:	12/2012

Project Contact

Contact Name:	Stuart LaRose
Email:	<slarose@fpm.wisc.edu>
Telephone No.:	(608) 263-3004 x

Project Scope Consideration Checklist

	Y	N
1. Will the building or area impacted by the project be occupied during construction? If yes, explain how the occupants will be accommodated during construction.	☑	☐
All project work will be coordinated through campus physical plant staff to minimize disruptions to daily operations and activities.		
2. Is the project an extension of another authorized project? If so, provide the project #...	☐	☑
3. Are hazardous materials involved? If yes, what materials are involved and how will they be handled?	☐	☑
Hazardous materials abatement is not anticipated on this project. Comprehensive building survey inventory data is not available on Wisconsin's Asbestos & Lead Management System (WALMS) <http://walms.doa.state.wi.us/>.		
4. Will the project impact the utility systems in the building and cause disruptions? If yes, to what extent?	☑	☐
Interruptions should be isolated to laboratories 5323 and 5335. All project work will be coordinated through campus physical plant staff to minimize disruptions to daily operations and activities.		
5. Will the project impact on the utility capacities supplying the building? If yes, to what extent?	☐	☑
6. Will the project impact the heating plant or the primary electrical system supplying the campus or institution? If yes, to what extent?	☐	☑

7. Have you identified the WEPA designation of the project...Type I, Type II, or Type III? ☑ ☐

   Type III.

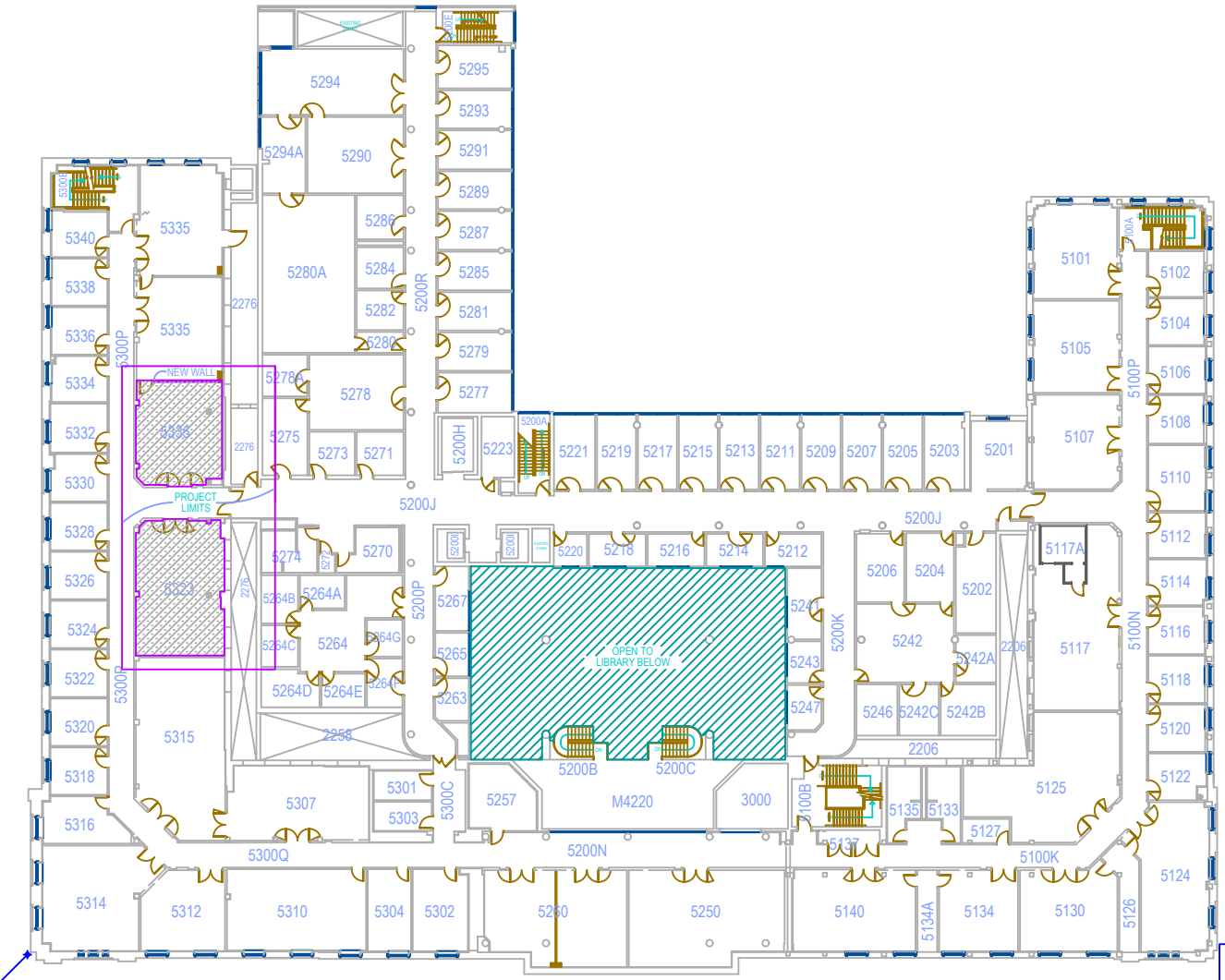
8. Is the project affected by historic status? ☑ ☐

   Chamberlin Hall is listed by the Wisconsin Historical Society as a building of historical significance and a key site in the Bascom Hill historic district.

9. Are there any other issues affecting the cost or status of this project? ☑ ☐

   All attempts should be made to complete project work and to occupy the space by May 2012 as this project work is directly related to a faculty retention package.

10. Will the construction work be limited to a particular season or window of opportunity? If yes, explain the limitations and provide proposed solution. ☐ ☑



FIFTH FLOOR PLAN

SCALE: 1" = 30'

SCALE REFLECTED ON 11 x 17 SHEET

NORTH

THE UNIVERSITY OF WISCONSIN-MADISON
DIVISION OF FACILITIES PLANNING AND MANAGEMENT
OFFICE OF SPACE MANAGEMENT

CHAMBERLIN HALL, THOMAS C
1150 UNIVERSITY AVENUE

DATE:	BLDG NO#:
03-04	0055
DRAWN BY: LW	FILE NO#: 0055A05
REVISIONS: 08-06, XX-XX	6 / X